

LIGNITE VISION 21 PROGRAM

April 29, 2002

Mr. Richard R. Long
Director, Air and Radiation Program
U.S. Environmental Protection Agency, Region VIII
Mail Code 8P-AR
999 18th Street, #300
Denver, CO 80202

Re: EPA Dispersion Modeling Analysis

Dear Mr. Long:

On behalf of the Lignite Vision 21 Program, I am submitting the following comments concerning the March 5, 2002 U.S. Environmental Protection Agency (EPA) correspondence and attached "Dispersion Modeling Analysis of PSD Class I Increment Consumption in North Dakota and Eastern Montana," dated January, 2002. The Lignite Vision 21 Program is a partnership between the State of North Dakota and the North Dakota lignite industry with the established purpose of promoting the use of this vast natural resource for the generation of clean, low-cost electricity to meet the growing energy needs of this region.

The Lignite Vision 21 Program is strongly committed to participating in the development of a North Dakota-based approach that is based on sound science and achieves state and national goals in a rational and cost-effective manner. In this spirit, Lignite Vision 21 is offering comments on the EPA Analysis that address the legal, policy and technical concerns raised by the EPA analysis.

For the reasons stated below, EPA should, as a result, respect and defer to North Dakota's ongoing administrative efforts, given that North Dakota has an EPA-approved PSD program and because the DOH is in the midst of a public comment period and will soon hold a public hearing that will begin on May 6, regarding this same subject and the state's own proposed modeling analysis.

A. Summary of Lignite Vision 21 Program Technical Comments

In preparing our comments, the Lignite Vision 21 Program has engaged the assistance of an expert air quality modeling and meteorological scientist, Mr. Doug Blewitt, to provide detailed technical comments and recommendations that provide the technical foundation

for Lignite Vision 21's comments. See Exhibit 1, which is incorporated herein by reference. Below is a partial summary of the technical concerns that have been identified.

1. EPA's analysis relies fully upon a proposed, yet never finalized air quality model that has never been validated for the purpose for which EPA is now using it – namely, for PSD increment regulatory purposes.
2. EPA has incorrectly applied its analysis to include the Fort Peck and Medicine Lake Wilderness areas in Montana, which are well beyond 200 km from sources in North Dakota. These distances are beyond the recommended application range of the Calpuff model. EPA has been a participant in the development of the IWAQM guidance which “concludes that CALPUFF can be recommended as providing unbiased estimates of concentration impacts for transport distances of order 200 km or less, and for transport times of 12 hours or less. For larger transport times and distances, our experience thus far is that CALPUFF tends to underestimate the horizontal extent of the dispersion and hence tends to overestimate the surface-level concentration maxima.” The Montana Class I areas are over 200 km from all of the major increment consuming sources in North Dakota.
3. EPA has not utilized data received in response to the DOH requests from industry made on July 3 & 11, 2001 regarding baseline emissions from industry sources. Industry submitted responses to the DOH letters in August and September indicating what they believe are their utilities' baseline emissions. As part of the ongoing North Dakota administrative process, the issue of what constitutes appropriate baseline emissions is slated to be addressed in the North Dakota proceedings.
4. The EPA analysis does not include the baseline oil and gas well emission inventory developed by the DOH. See DOH letter dated March 1. The recently compiled DOH oil and gas well emission inventory has a significant impact on modeling results. Because emissions from the oil and gas well inventory have decreased from the baseline period, the most recent DOH modeling analysis indicates a net increment expansion. Prior preliminary and now outdated DOH modeling analyses and the current EPA modeling analysis treat the oil and gas emissions as increment consuming, which is not consistent with the more current available information used by the DOH.
5. EPA used the 90th percentile of 1999-2000 stationary source emissions. This appears to be arbitrary given that nothing in statute or regulation prescribes the 90th percentile approach. Furthermore, the Lignite Vision 21 Program understands that the DOH has expressly not used 1999 emissions data in its analysis because they believe 1999 emissions data are not representative of stationary sources operations. In Section 3.1 (page 17) of EPA's analysis, it is stated: “The two-year study period should generally be the most recent two-years, provided that the two-year period is representative of normal source

operation.” Not only are the years 2000-2001 the most recent two years, they are more representative of normal source operation than the years 1999-2000. Phase 2 of the CAA Title IV Acid Rain Program was initiated January 1, 2000. Industry SO₂ emissions in year 2000 were approximately 25,000 tons less than in the years 1998 and 1999. Lastly, we understand that EPA has been cautioned previously concerning the flaws in using 1999 CEMs data related to problems with stack flow measurements. See, DOH February 27, 2002 letter to Richard Long. These flow discrepancies are believed to have caused actual emissions to be over-predicted by as much as 20%. As a result, EPA should be using the more recent and representative emissions data in its modeling analysis.

B. Summary of Lignite Vision 21 Legal and Regulatory Comments

In addition to the technical review of the EPA Modeling Report, the Lignite Vision 21 Program felt it important to examine the Report’s stated conclusions with regard to how it fits within EPA’s authority under various legal statutes and regulations. To perform this review, the Lignite Vision 21 Program engaged Mr. Paul Seby of Friedlob Sanderson Paulson and Tourtillott, LLC in Denver, Colorado, and Mr. Seby’s detailed review of the legal and regulatory issues associated with the EPA Report are attached to this comment package and incorporated herein by reference. See Exhibit 2. In reviewing Mr. Seby’s assessment, Lignite Vision 21 believes it particularly important for EPA to consider the following key points:

1. EPA’s analysis is based upon the use of a preliminary model (CALPUFF) which has not been approved by EPA as an air quality Guideline Model under 40 CFR 51 Appendix W. Further, EPA has acknowledged the technical limitations of the draft model when applied to certain distances – such as those in the EPA Modeling Analysis. The CALPUFF model has also never undergone a peer-reviewed technical evaluation for the purposes EPA is now proposing to use the model in North Dakota. As such, it would be arbitrary and capricious for EPA to use a CALPUFF-based analysis as the basis for any future “regulatory action.”
2. Contrary to the statement that the EPA Analysis is “based upon 20 years-plus of EPA regulations and policies,” the Analysis is based upon several assumptions and approaches that are not regulatory in nature and thus cannot be used for regulatory purposes in the present situation.
3. EPA has not recognized the several DOH-issued PSD and construction permits prior to Fort Peck Indian Tribe re-designation of its tribal lands in Montana to Class I in 1984. Therefore, EPA has inappropriately applied, retroactively, the PSD increments to Fort Peck – using a not yet approved modeling tool that EPA recognizes to be technically unsound when applied to such distances.

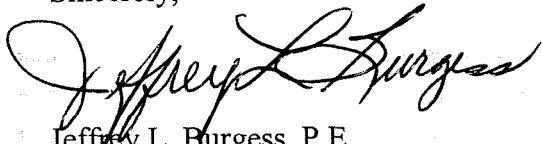
4. Despite the process established by the Clean Air Act, the EPA modeling analysis does not recognize the PSD Class I variances granted previously to Dakota Gasification Company and Little Knife Gas Company. The CAA provides that sources granted variances are subject to the alternate increment (an increased amount above the Class I increment). EPA is incorrectly considering emissions from these facilities as consuming the Class I increment. The emissions from these facilities, however, do not count against the Class I increment.

C. Conclusion

States like North Dakota, consistent with the Clean Air Act, are best served to balance all the competing air quality interests in the state and to construct a well designed set of air quality programs. As the Lignite Vision 21 Program analyzes it, the EPA Report appears to dilute North Dakota's role in accomplishing those aims.

Further, EPA's March 5 letter and attached draft dispersion modeling analysis, if carried to its logical end, would be a preemption of North Dakota's proper role under the federal Clean Air Act. Since North Dakota is actively working to address the PSD increment-related issues, EPA should pull back and defer to the state in the manner intended by Congress.

Sincerely,



Jeffrey L. Burgess, P.E.
Manager of Environmental Services
Lignite Vision 21 Program

Attachments: Exhibit 1, Blewitt Technical Analysis
Exhibit 2, Seby Legal Analysis